

Claims

What is claimed is:

1. A disposable absorbent article comprising:

- (i) an outer cover
- (ii) at least one single piece of flexible material with an active fastening surface;
- (iii) a first waist region;
- (iv) a second waist region opposite the first waist region

wherein:

- (a) the active fastening surface of the at least one single piece of flexible material provides an at least one fastener; and
- (b) the outer cover defines an inside surface and an outside surface;

such that in use, the active fastening surface of the at least one fastener anchors to the outside surface of the outer cover in the first waist region and the at least one fastener fastens the outside surface of the outer cover in the second waist region thereby forming a waist opening and a pair of leg openings.

2. The disposable absorbent article of claim 1, which is an incontinence product.

3. The disposable absorbent article of claim 1, which is a diaper.

4. The disposable absorbent article of claim 1, wherein the at least one fastener comprises a generally rectangular shape, square shape, circular shape, triangular shape, oval shape, linear shape, or a combination thereof.

5. The disposable absorbent article of claim 1, wherein the at least one fastener is generally rectangular in shape.

6. The disposable absorbent article of claim 1, wherein the active fastening surface of the at least one single piece of flexible material is substantially covered by active fastening material.

7. The disposable absorbent article of claim 6, wherein the active fastening material comprises a plurality of hooks.

8. The disposable absorbent article of claim 7, wherein the plurality of hooks are configured in rows of about 4 rows of hooks/cm² to about 30 rows of hooks/cm² independently in the machine direction, the cross-machine, or a combination thereof.

9. The disposable absorbent article of claim 7, wherein the plurality of hooks have a density of about 100 hooks/cm² to about 750 hooks/cm² independently in the machine direction, cross machine direction, or a combination thereof.

10. The disposable absorbent article of claim 7, wherein the active fastening material is configured in at least two selective surface areas; wherein each selective surface area has a hook density of about 2 cm² to about 8 cm² independently in the machine direction, cross machine direction, or a combination thereof.

11. The disposable absorbent article of claim 1, wherein the at least one fastener comprises a anchor end and a user end.

12. The disposable absorbent article of claim 11, wherein the anchor end, the user end, or both of the at least one fastener comprises a generally rectangular shape, square shape, circular shape, triangular shape, oval shape, linear shape, or a combination thereof.

13. The disposable absorbent article of claim 11, wherein the anchor end of the at least one fastener has a shear strength of greater than 3,000 grams tensile.
14. The disposable absorbent article of claim 11, wherein the anchor end of the at least one fastener has a length of about 0.75 to about 1.25 inches and a width of about 1.5 to about 4.0 inches.
15. The disposable absorbent article of claim 11, wherein the user end of the at least one fastener has a shear strength of greater than 2,000 grams tensile.
16. The disposable absorbent article of claim 11, wherein the user end of the at least one fastener has a width of about 0.75 to about 2.0 inches.
17. The disposable absorbent article of claim 11, wherein the anchor end of the at least one fastener is affixed to the at least one outside surface of the outer cover by thermal point bonding, ultrasonic bonding, adhesive bonding, or a combination thereof.
18. The disposable absorbent article of claim 17, wherein the adhesive bonding may be applied by any pattern of at least one adhesive bead, line, swirl, dot, or combination thereof independently in the machine direction, cross machine direction, or a combination thereof.
19. The disposable absorbent article of claim 18, wherein the at least one adhesive bead is less than about 0.25 inches in width.
20. The disposable absorbent article of claim 1, wherein the outer cover provides an active landing material.
21. The disposable absorbent article of claim 1, wherein the outer cover comprises at least one attachment panel.

22. The disposable absorbent article of claim 21, wherein the at least one attachment panel comprises loop material.

23. A disposable absorbent article comprising:

- (i) an outer cover
- (ii) at least one single piece of flexible material with an active fastening surface;
- (iii) a first waist region;
- (iv) a second waist region opposite the first waist region

wherein:

- (a) the active fastening surface of the at least one single piece of flexible material provides an at least one fastener; and
- (b) the outer cover defines an inside surface and an outside surface and includes a pair of ears in the first waist region;

such that in use, the active fastening surface of the at least one fastener anchors to the outside surface of the ears of the outer cover in the first waist region and the at least one fastener fastens the outside surface of the outer cover in the second waist region thereby forming a waist opening and a pair of leg openings.

24. The disposable absorbent article of claim 23, wherein the pair of ears comprise an elastomeric material.

25. The disposable absorbent article of claim 24, wherein the elastomeric material is a neck-bonded laminate (NBL).

26. The disposable absorbent article of claim 23, wherein the at least one fastener comprises an anchor end and a user end.

27. The disposable absorbent article of claim 26, wherein the anchor end of the at least one fastener is reinforced with glue.

28. The disposable absorbent article of claim 26, wherein the anchor end of the at least one fastener has a shear strength of greater than 3,000 grams tensile.

29. The disposable absorbent article of claim 26, wherein the anchor end of the at least one fastener has a length of about 0.75 to about 1.25 inches and a width of about 1.5 to about 4.0 inches.

30. The disposable absorbent article of claim 26, wherein the user end of the at least one fastener has a shear strength of greater than 2,000 grams tensile.

31. The disposable absorbent article of claim 26, wherein the user end of the at least one fastener has a width of about 0.75 to about 2.0 inches.

32. The disposable absorbent article of claim 23, which is an incontinence product.

33. The disposable absorbent article of claim 23, which is a diaper.

34. The disposable absorbent article of claim 23, wherein the active fastening surface of the at least one single piece of flexible material is substantially covered by active fastening material.

35. The disposable absorbent article of claim 34, wherein the active fastening material comprises a plurality of hooks.

36. A disposable absorbent article comprising:

- (i) an outer cover

- (ii) at least one single piece of flexible material with an active fastening surface;
- (iii) a first waist region;
- (iv) a second waist region opposite the first waist region

wherein:

- (a) the active fastening surface of the at least one single piece of flexible material provides an at least one fastener; and
- (b) the outer cover defines an inside surface and an outside surface;

such that in use, the active fastening surface of the at least one fastener anchors to the outside surface of the outer cover in the first waist region and is affixed to the outside surface of the outer cover in the first waist region with adhesive bonding; and the at least one fastener fastens the outside surface of the outer cover in the second waist region thereby forming a waist opening and a pair of leg openings.

37. The disposable absorbent article of claim 36, which is an incontinence product.

38. The disposable absorbent article of claim 36, which is a diaper.

39. The disposable absorbent article of claim 36, wherein the active fastening surface of the at least one single piece of flexible material is substantially covered by active fastening material.

40. The disposable absorbent article of claim 39, wherein the active fastening material comprises a plurality of hooks.

41. The disposable absorbent article of claim 36, wherein the outer cover comprises a pair of ears.

42. The disposable absorbent article of claim 41, wherein the pair of ears comprise an

elastomeric material.

43. The disposable absorbent article of claim 42, wherein the elastomeric material is a neck-bonded laminate (NBL).

44. The disposable absorbent article of claim 36, wherein the at least one fastener comprises a anchor end and a user end.

45. The disposable absorbent article of claim 44, wherein the anchor end of the at least one fastener is affixed to the at least one outside surface of the outer cover by thermal point bonding, ultrasonic bonding, adhesive bonding, or a combination thereof.

46. The disposable absorbent article of claim 45, wherein the adhesive bonding may be applied by any pattern of at least one adhesive bead, line, swirl, dot, or combination thereof independently in the machine direction, cross machine direction, or a combination thereof.

47. The disposable absorbent article of claim 46, wherein the at least one adhesive bead is less than about 0.25 inches in width.

48. The disposable absorbent article of claim 44, wherein the anchor end of the at least one fastener has a shear strength of greater than 3,000 grams tensile.

49. The disposable absorbent article of claim 41, wherein the anchor end of the at least one fastener has a length of about 0.75 to about 1.25 inches and a width of about 1.5 to about 4.0 inches.

50. The disposable absorbent article of claim 44, wherein the user end of the at least one fastener has a shear strength of greater than 2,000 grams tensile.

51. The disposable absorbent article of claim 44, wherein the user end of the at least one fastener has a width of about 0.75 to about 2.0 inches.